



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,721	08/13/2003	Shan-Wen Chang	PMXP0160USA	1720

43831 7590 11/07/2006

BERKELEY LAW & TECHNOLOGY GROUP
1700NW 167TH PLACE
SUITE 240
BEAVERTON, OR 97006

EXAMINER

EGAN, SCOTT T

ART UNIT PAPER NUMBER

2621

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,721

Applicant(s)

CHANG ET AL.

Examiner

Scott Egan

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/13/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/604,721.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received..

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

1. The disclosure is objected to because of the following informalities: "isa" (paragraph [0005], line 2 should be changed to {is a}. "thatis" (paragraph [0005], line 7) should be changed to {that is}. "usedin" (paragraph [0006], line 5) should be changed to {used in}. "materialand" (paragraph [0021], line 7) should be changed to {material and}. "26by" (paragraph [0021], line 18) should be changed to {26 by}. "upwardsin" (paragraph [0021], line 30) should be changed to {upward in}. "is as following" (paragraph [0022], lines 1-2) should be changed to {is as follows}. "user"s" (paragraph [0022], line 18) should be changed to {user's}. "optical viewfinders" (entire specification) should be changed to {optical viewfinder}. "second digital camera 22" (entire specification) should be changed to {digital camera 22}.

Appropriate correction is required.

Claim Objections

2. Claims 1, 6, 11 and 14 are objected to because of the following informalities:

Art Unit: 2621

Consider claim 1, "a framing mask for masking the laser beam diverged by the first lens to form a laser-framing viewfinder;" A laser-framing viewfinder has already been claimed, therefore, the claim will be interpreted for examination purposes as "a framing mask for masking the laser beam diverged by the first lens to form the laser-framing viewfinder;"

Consider claim 6, "a second lens set installed on *the* sliding set," Claim 6 is dependent on claim 5 and claim 1 where there is no sliding set mentioned. For examination purposes this claim will be interpreted as "a second lens set installed on a sliding set."

Consider claim 11, "wherein when the sliding set is positioned in the housing, the laser source is switched on, the first lens diverges the laser beam to the framing mask to form a laser-framing viewfinder," A laser-framing viewfinder has already been claimed, therefore, the claim will be interpreted for examination purposes as "wherein when the sliding set is positioned in the housing, the laser source is switched on, the first lens diverges the laser beam to the framing mask to form *the* laser-framing viewfinder,"

Consider claim 14, "comprisesshading" should be changed to {comprises shading}.

Appropriate correction is required.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

Art Unit: 2621

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. **Claims 1-10** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,741,809.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the:

Patent	Present Application
1. An image capturing apparatus with laser-framing viewfinder and laser pointer functions , the image capturing apparatus comprising: a housing; a laser source installed inside the housing for generating a laser beam; a first lens set installed inside the housing for diverging the laser beam; a reflector installed inside the housing in a rotatable manner for reflecting the laser beam from the first lens set; a second lens set installed inside the housing for diverging the laser beam	1. An image capturing apparatus with a laser-framing viewfinder, the image capturing apparatus comprising: a housing; a laser source installed inside the housing for generating a laser beam; a first lens installed inside the housing for diverging the laser beam; a framing mask for masking the laser beam diverged by the first lens to form a laser-framing viewfinder; and a camera lens installed on the housing for capturing and object in the laser-framing viewfinder.

<p>reflected by the reflector; a framing mask for masking the laser beam diverged by the second lens set to form a laser-framing viewfinder; a third lens set installed on the housing for focusing the laser beam from the first lens set; and a camera lens installed on the housing for capturing an object in the laser-framing viewfinder; wherein when the reflector rotates to a first position, the reflector is capable of reflecting the laser beam from the first lens set, the second lens set is capable of diverging the laser beam reflected by the reflector, and the framing mask is capable of masking the laser beam diverged by the second lens set to form the laser-framing viewfinder, and when the reflector rotates to a second position, the third lens set is capable of focusing the laser beam from the first lens set.</p>	<p>2. The image capturing apparatus of claim 1 further comprising a reflector installed inside the housing for reflecting the laser beam generated by the laser source.</p>
<p>2. The image capturing apparatus of claim 1, wherein the reflector is a plane mirror.</p>	<p>3. The image capturing apparatus of claim 2 wherein the reflector is a plain mirror that can be adjusted on the housing.</p>
<p>3. The image capturing apparatus of claim 1, wherein the housing comprises a main body and a sliding set installed on the main body, and the laser source is installed inside the main body, and the first lens set and the second lens set are installed inside the sliding set.</p>	<p>4. The image capturing apparatus of claim 1 wherein the housing comprises a main body and a sliding set installed on the main body, and the laser source and the first lens are installed inside the main body and the sliding set respectively.</p>

4. The image capturing apparatus of claim 3, further comprising an optical viewfinder comprising two optical viewfinder ports installed on the main body for receiving light to view the object being image captured.	5. The image capturing apparatus of claim 1 further comprising two optical viewfinders installed on the housing for receiving light to view and object being image captured.
5. The image capturing apparatus of claim 4, further comprising a fourth lens set installed on the sliding set, wherein the fourth lens set slides to a position between the two optical viewfinder ports with the sliding set.	6. The image capturing apparatus of claim 5 further comprising a second lens set installed on the sliding set, wherein the second lens set can slide to a position between the two optical viewfinders with the sliding set.
6. The image capturing apparatus of claim 5, wherein the fourth lens Set comprises a plano-concave lens and a convexo-concave lens.	7. The image capturing apparatus of claim 6 wherein the second lens set comprises a plano-concave lens and a convexo-concave lens.
7. The image capturing apparatus of claim 1, wherein the framing mask comprises shading material.	8. The image capturing apparatus of claim 1, wherein the framing mask comprises shading material.
8. The image capturing apparatus of claim 1, further comprising a connecting port for outputting image data.	9. The image capturing apparatus of claim 1 further comprising a connecting port for outputting image data.
9. The image capturing apparatus of claim 8, wherein the connecting port conforms to USB or the IEEE1394 standards.	10. The image capturing apparatus of claim 9 wherein the connecting port conforms to USB or the IEEE1394 standards.

Claim 1 of the present application is broader and fully encompassed by **Claim 1** of the referenced patent. In view of the broadly recited "image capturing apparatus with laser-framing viewfinder" of **Claim 1**, **Claim 1** of the patent includes all of the limitations

Art Unit: 2621

of **Claim 1** as well as laser pointer functions, a third lens set installed on the housing for focusing the laser beam from the first lens set, and wherein when the reflector rotates to a first position, the reflector is capable of reflecting the laser beam from the first lens set, the second lens set is capable of diverging the laser beam reflected by the reflector, and the framing mask is capable of masking the laser beam diverged by the second lens set to form the laser-framing viewfinder, and when the reflector rotates to a second position, the third lens set is capable of focusing the laser beam from the first lens set. Thus, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to have included the narrower limitations.

Claim 2 of the present application is covered in **Claim 1** of the referenced patent.

Claim 3 of the present application is the same as **Claim 2** of the referenced patent.

Claim 4 of the present application is the same as **Claim 3** of the referenced patent.

Claim 5 of the present application is the same as **Claim 4** of the referenced patent.

Claim 6 of the present application is the same as **Claim 5** of the referenced patent.

Claim 7 of the present application is the same as **Claim 6** of the referenced patent.

Claim 8 of the present application is the same as **Claim 7** of the referenced patent.

Claim 9 of the present application is the same as **Claim 8** of the referenced patent.

Claim 10 of the present application is the same as **Claim 9** of the referenced patent.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-5, 8-9** are rejected under 35 U.S.C. 102(b) as being anticipated by **Correa et al. (US 6,340,114)**.

Consider **claim 1**, Correa et al. explicitly teach "an image capturing apparatus with a laser-framing viewfinder (see Figure 4 and 11), the image capturing apparatus comprising:

a housing (chassis member 26, Figures 1 and 2);

a laser source (laser diode 212) installed inside the housing (laser diode 212 is inside laser beam generator 30, which can be found inside chassis member 26, see Figures 1 and 2) for generating a laser beam (projects a beam of light; see figure 12);

a first lens (torroidal lens 214) installed inside the housing (the beam generator assembly, which is inside the chassis member 26, is described as containing the

Art Unit: 2621

torroidal lens 214, see column 13 lines 22-30 and Figures 1 and 2) for diverging the laser beam;

a framing mask (diffractive optical element 202) for masking the laser beam diverged by the first lens to form a laser-framing viewfinder (multiple beamlets are produced by the diffractive optical element, column 12, lines 58-60); and a camera lens (lens assembly 22) installed on the housing (see Figures 1 and 2, lens assembly 22 can be found inside chassis member 26) for capturing an object in the laser-framing viewfinder."

Consider **claim 2**, Correa et al. explicitly teach "the image capturing apparatus of claim 1, further comprising a reflector (moving mirror 122) installed inside the housing (moving mirror 122 is part of the lens assembly 22, which is inside chassis member 26, see Figures 1 and 2 and column 12, lines 15-30) for reflecting the laser beam generated by the laser source (to divert the beam path, column 12, lines 17-18)."

Consider **claim 3**, Correa et al. explicitly teach "the image capturing apparatus of claim 2, wherein the reflector is a plane mirror that can be adjusted on the housing (moving mirror 122 is designed to rotate about a pivot point and column 12, lines 24-25)."

Consider **claim 4**, Correa et al. explicitly teach "the image capturing apparatus of claim 1 wherein the housing comprises a main body (Figure 12) and a sliding set (cylindrical housing, 210) installed on the main body, and the laser source (laser diode 212) and the first lens (torroidal lens 214) are installed inside the main body and the

Art Unit: 2621

sliding set respectively (Figure 12 shows the laser source and the first lens inside a housing)."

Consider **claim 5**, Correa et al. explicitly teach "the image capturing apparatus of claim 1, further comprising two optical viewfinders (optical baffle 20 and window 16) installed on the housing for receiving light to view an object being image captured (the image sensor 12 is an area CCD having a window 16 through which an incident image is received. The CCD converts the incident light, column 7, lines 36-38 and light from the field passes through an optical baffle 30 and into the lens assembly 22 which focuses the light on the surface of the CCD, column 7, lines 50-53)."

Consider **claim 8**, Correa et al. explicitly teach "the image capturing apparatus of claim 1, wherein the framing mask comprises shading material (see column 12, lines 53-62, the aiming portion is interpreted to contain the "shading material" around the outside of the desired image capture area in order to focus the light on the desired target, see also aiming pattern generated in column 13, lines 44-64 and Figure 11)."

Consider **claim 9**, Correa et al. explicitly teach "the image capturing apparatus of claim 1, further comprising a connecting port for outputting image data (images also may be transmitted, especially to the serial port of PC or terminal to permit display or recording of the image incident on the imaging sensor, see column 17, lines 5-8)."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2621

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Correa et al. (US 6,340,114)** in view of **Niikawa (US 6,668,134)**.

Consider **claim 10**, Correa et al. teach "The image processing apparatus of claim 9."

However, Correa et al. do not explicitly teach that the connecting port conforms to the USB or the IEEE1394 standards.

In the same field of endeavor, Niikawa teaches an (image display device 21 with two USB ports 31 to which a PC 19 is connected and that the interface for making external connection with the personal computer 19 for communication is based on USB standard, see column 6, lines 40-43 and column 10, lines 17-19 and Figure 9(a)).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the use of a port that conforms to USB standards found in Niikawa into the image capturing apparatus in Correa et al. in order to easily interconnect the image capturing apparatus with a PC or other compatible

Art Unit: 2621

devices without powering down or rebooting and at the same time using an almost universal interface.

Allowable Subject Matter

8. **Claims 11-15** are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

Consider **claim 11**, the closest prior art teaches an imaging apparatus which is capable of illuminating the targeted area with a laser beam. The imaging apparatus described in the art has a housing, which contains a laser beam generator, a lens for diverging the beam, a framing mask for masking the projected beam in order to form an illumination area, a lens for capturing the image, and a plane mirror reflector for reflecting the generated beam. The housing is broken down into different pieces, which contain the described parts above. There are also two windows in the front of the imaging apparatus that are used as viewfinders. The imaging apparatus can be connected to other devices that conform to specified standards via a connecting port in order to output the imaging information.

The closest prior art does not teach or fairly suggest the following specifics of the claimed "slide set". It does not teach that there is a section of the main body that can slide up and down in the camera, having the following effects. When it is positioned inside the housing the laser-framing viewfinder will be active, the power of the laser generator will be switched on and the user will only be able to use the laser-framing

Art Unit: 2621

viewfinder when capturing an image (in this configuration you can not use the optical viewfinder). When the section is slid upward the optical viewfinder will be active, the power of the laser generator will be switched off and the user will only be able to use the optical viewfinder when capturing an image (in this configuration you can not use the laser-framing viewfinder).

Claims 12-15 are allowed due to their dependence on **claim 11**.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Egan whose telephone number is (571) 270-1452. The examiner can normally be reached on Monday-Friday 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 270-1455. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER